

IMPROVED METHOD AND APPARATUS FOR
CONTROLLING AUTOMATIC BOWLING PINSETTTERS

ABSTRACT OF THE DISCLOSURE

An automatic pinsetter of the type having entirely mechanical logic control is retrofitted with an electrical control system that replaces mechanical start-stop mechanism used to stop and start a clutch which engages a motor driving the sub-systems of the pinsetter. The system includes an electrical control module having a solenoid that operates the clutch, so as to engage or disengage the motor, depending on the current operating state of the pinsetter. A series of switches replace various mechanical linkages to sense pinsetter conditions, and deliver signals to the control module. An out-of-range pin condition can be sensed and automatically cleared by the control system.